

**DIAGNOSIS OF A NEW AFRICAN MASTACEMBELID
SPINY-EEL GENUS *AETHIOMASTACEMBELUS* GEN. NOV.
(MASTACEMBELOIDEI : SYNBRANCHIFORMES)**

by

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ABSTRACT. *Aethiomastacembelus*, a new mastacembelid fish genus, has been described from Africa in replacement of *Afromastacembelus* Travers, 1984, which, due to nomenclatorial priorities, must become a junior synonym of *Caecomastacembelus* Poll, 1958.

RÉSUMÉ. *Aethiomastacembelus*, genre nouveau de poissons Mastacembélidés, a été décrit de l'Afrique, en remplacement partiel d'*Afromastacembelus* Travers, 1984 qui, à la suite des règles de nomenclature, a été mis en synonymie avec *Caecomastacembelus* Poll, 1958.

Key-words : *Aethiomastacembelus*, Mastacembelidae, Africa, New genus,.

Travers (1984a and b) published the first review of both Asian and African mastacembeloid fishes, since the groups original description in 1777. Analyses based on comparative anatomical studies revealed natural monophyletic groups and an hypothesis of their phylogenetic relationships (summarized in a cladogram ; see Travers, 1984b : fig. 19). The groups existing classification was found to be inadequate and several new taxonomic combinations were proposed. These tended to concern higher taxonomic categories. Observations indicated that the mastacembeloids, for long thought to be perciform fishes, should be considered part of the Synbranchiformes. This conclusion was independently corroborated by Gosline (1983).

Furthermore, the African species placed in *Mastacembelus* were found not to be congeneric with the Asian. A new subfamily (*Afromastacembelinae*) was created for two endemic African lineages, of which one, *Caecomastacembelus* Poll, 1958 had already been named whilst the other, *Afromastacembelus* Travers, 1984 was described as new.

At the same time it was recognized that further study of African interspecific relationships was required and all the species in need of revision. This has now been undertaken (Travers, in prep.) and the 54 nominal species have all been reviewed resulting in the synonymization of 17 taxa (10 *Syn. Nov.*) and the recognition of seven new species. Roberts and Travers (1986) described the first of these new species, the others are scheduled for publication. These authors gave a more thorough diagnosis of the new African mastacembelid genus, *Afromastacembelus* than had been available earlier. They referred to the fact that several species, including their new one, needed reallocating from the provisional generic placement temporarily given by Travers (1984b : 145).

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My more recent revision has shown that among the reallocated species is *Afromastacembelus tanganicae* (Günther, 1893), which is now found to be part of *Caecomastacembelus*. Unfortunately, *A. tanganicae* was designated by Travers (1984b : 145) as the Type species for his new genus, due to it being the earliest species to be described among those in this assemblage.

Reallocation to *Caecomastacembelus* of the Type species of *Afromastacembelus* places this generic name in the synonymy of the former.

The African mastacembelid taxon coordinate to *Caecomastacembelus* will, therefore, be left unnamed. To rectify this situation a new genus is erected here for most of those species previously allocated to *Afromastacembelus* and from among these a new Type species will be designated.

REDIAGNOSIS OF THE AFROMASTACEMBELINAE TRAVERS, 1984

Type Genus : *Aethiomastacembelus* gen. nov.

Diagnosis : Mastacembelid fishes with confluent caudal fin rays continuous with posterior rays of dorsal and anal fin. Caudal fin skeleton generally with two separate and autogenous hypurals, tend to have parhypural fused to lower edge of ventral element and to have 12 or less principal fin rays. Loss of ascending process on urohyal and direct articulation between urohyal and basibranchial 1. Scapula foramen not completely bone enclosed. Tendency to have noticeably more caudal than abdominal vertebrae.

This subfamily represents the Ethiopian mastacembelid species, widely distributed through tropical and subtropical regions of the continent. 42 or 43 species recognized and arranged in two genera.

CAECOMASTACEMBELUS POLL, 1958

Synonymy : *Afromastacembelus* Travers, 1984.

Type species : *Caecomastacembelus brichardi* Poll, 1958 (by original designation and monotypy).

Diagnosis : Afromastacembeline fishes with even body depth for most of length. Tendency to have blunt snout and jaw cleft below or anterior to posterior nasal. Median fins low and fleshy, increase in height caudally and tend to have more anal than dorsal rays. Posterior origin of first dorsal spine, relative to pectoral fin when flat against lateral wall of body. 8-12 predorsal vertebrae. 8-10 principal caudal fin rays. 24 species will be allocated to this genus.

AETHIOMASTACEMBELUS GEN. NOV.

Type species : *Aethiomastacembelus marcheii* (Sauvage, 1879).

Diagnosis : Afromastacembeline fishes with body depth greatest midway along length. Tendency to have pointed snout and jaw cleft extending beyond posterior nasal. Median fins of even height and tend to have more dorsal than anal rays. Anterior origin of first dorsal spine, dorsal or just posterior to pectoral fin

when layed against lateral wall of body. 4-7 predorsal vertebrae. 10-12 principal caudal fin rays. 18 or 19 species will be allocated to this new genus.

REFERENCES

- GOSLINE W.A., 1983. - The relationships of the mastacembelid and synbranchid fishes. *Jap. J. Ichthyol.* 29 : 323-328.
- ROBERTS T.R. & R.A. TRAVERS, 1986. - *Afromastacembelus sexdecimspinus*, a new species of mastacembelid spiny-eel from rapids in the Cross River basin, Cameroon. *Cybium* 10(2) : 105-114.
- TRAVERS R.A., 1984a. - A review of the Mastacembeloidei, a suborder of synbranchiform teleost fishes. Part I : Anatomical descriptions. *Bull. Br. Mus. nat. Hist. (Zool.)*, 46 : 1-133.
- TRAVERS R.A., 1984b. - A review of the Mastacembeloidei, a suborder of synbranchiform teleost fishes. Part II : Phylogenetic analysis. *Bull. Br. Mus. nat. Hist. (Zool.)*, 47 : 83-150.

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